SONY

3-786-975-21 (4)

Compact Disc Compact Player

COMPACT disc DIGITAL AUDIO

D-25

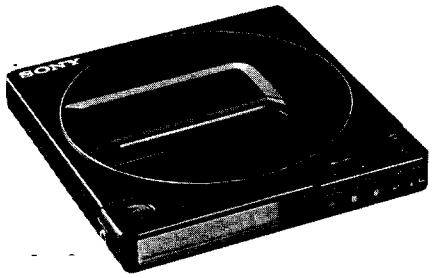
Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

Owner's Record

The model number and the serial number are located at the bottom. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. D-25 Serial No. _____



Discman

Sony Corporation © 1989 Printed in Japan

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna
Relocate the equipment with respect to the receiver
Move the equipment away from the receiver
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

CAUTION

The use of optical instruments with this product will increase eye hazard.

For the customers in Canada
This apparatus complies with the class B limits for radio noise emmissions set out in radio interference regulations.

Precautions

On safety

- As the laser beam used in this compact disc player is harmful to the eyes, **do not attempt to disassemble the casing.** Refer servicing to qualified personnel only.
- **Do not put anything in the safety slot inside the disc compartment.** If you do, the laser beam may come out when the lid is opened. Do not put anything in the DC IN 9 V (external power input) jack.
- The lens on the disc table should be kept clean. **Do not touch the lens or poke at it.** If you do, the lens may be damaged and the player will not operate properly.
- **Do not wrap the player in a cloth, blanket, etc.** If you do, the temperature inside the player may rise, resulting in malfunction of the player.
- Should any solid object or liquid fall into the player, disconnect the power source and have the player checked by qualified personnel before operating it any further.
- When the unit will not be used for a long time, be sure to disconnect the power source (AC power adaptor, rechargeable battery pack, car battery cord or car mount plate) from the unit. To remove the AC power adaptor from the wall outlet, grasp the adaptor itself; never pull it by the cord.

On power sources

Use the supplied rechargeable battery pack, house current, or a car battery.
For AC operation: Use the AC power adaptor supplied with this player. Do not use any other AC power adaptor as it may cause malfunction.
For car battery operation: Use a car battery cord recommended for this player.

On operation

Since the CD system offers a wide dynamic range, the peaks of the high level inputs are recorded with high fidelity, and the noise level is very low. **Do not turn up the volume while listening to a portion with no audio signals or very low level inputs.** If you do, the speakers may be damaged when a peak level portion is played.

On installation

- Never put the unit:
  —near heat sources such as radiators or airducts.
  —in direct sunlight.
  —exposed excessive dust.
  —exposed moisture or rain.
  —exposed mechanical vibration or shock.
  —in an inclined position.
- If the player is brought directly from a cold location to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the player. Should this occur, the player will not operate. In this case, **remove the disc and leave the player in a warm place for about an hour until the moisture evaporates.**
- For the unit to operate at its best, it should not be subjected to temperatures below 5°C (41°F) or above 35°C (95°F).

About the headphones

- Avoid listening with your headphones:
  —**while driving, cycling, etc.**
  —for an extended time at a loud volume.
- Remember not to disturb those close to you with the sounds from your headphones.

If you have any questions or problems concerning your unit, please contact your nearest Sony dealer.

Maintenance

Cleaning the Casing

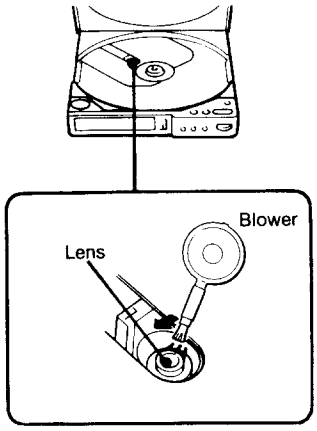
Clean the casing with a soft cloth slightly moistened with water or mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine as they may mar the finish of the casing.

Cleaning the Lens

If you have accidentally touched the lens with a dirty finger or if the dust on the lens prevents the unit from operating properly, open the disc compartment lid and clean the lens.

To remove dust
Blow on the lens a few times with a commercially available blower, brush the dust away in the direction of the arrow, then blow on the lens again.

If the lens is still dirty after you have followed the above instructions and the unit still does not function properly, please consult your nearest Sony dealer.



Notes on Compact Discs

Do not expose the disc to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in the temperature inside the car.

Before playing, clean the disc with the optional cleaning cloth.
Wipe the disc from the center out.

Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

After playing, store the disc in its case.

Cleaning the Headphones Plug

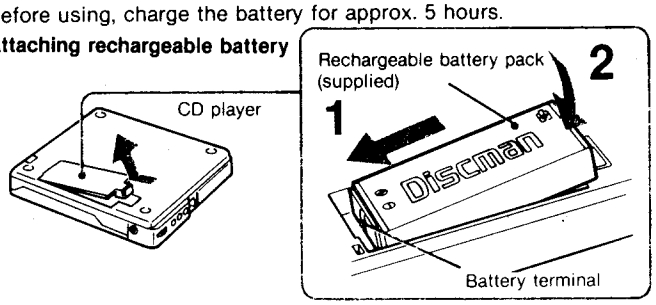
Keep the plug of your headphones clean to obtain the optimum sound. Wipe it with a dry, soft cloth.

Power Sources

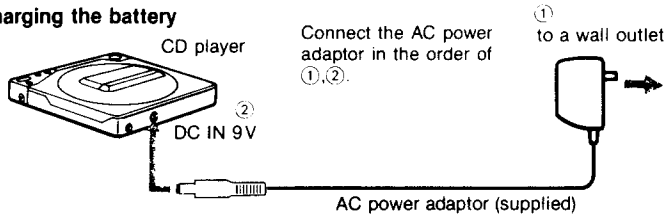
Using with Recharbeagle Battery

Before using, charge the battery for approx. 5 hours.

Attaching rechargeable battery



Charging the battery



[CHARGE] will blink during charging and will disappear when charging ends.

Using with House Current

Connect the supplied AC power adaptor in the same way as for charging the battery.

When the unit will not be used, be sure to disconnect the AC power adaptor.

Battery life

Approx. 2.5 hours of continuous play is possible when you charge the battery for 5 hours and approx 2 hours when ch it for 3 hours.

Notes on charging

- For charging, use only the supplied AC power adaptor. You cannot charge the battery during play.
- Do not attach the BP-100 (optional) and the BP-2 (supplie the same time.
- **Do not charge the unit for more than 24 hours.**
- **Remember to recharge the battery pack after every use.** Leaving the unit discharged may shorten its life.

Notes on rechargeable battery pack

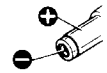
- When the battery pack will not be used for a long time, **recharge it every six months.** When you use it again, be s to charge it first for about half an hour.
- Store the battery pack in a temperature range of 5°C–35° (41°F–95°F).
- Never throw the battey pack into fire.
- Never short-circuit the battery plug.
- If the electrolyte inside the pack should come into conta with cloth or skin, wash the contaminated objects with w immediately. The electrolyte contains sulfuric acid.

When to replace the rechargeable battery pack

Repeating charging the battery pack makes the operating t become shorter.

If the operating time of the CD player becomes the half of original time after the battery pack has been fully charged, replace it with new one (BP-2 optional).

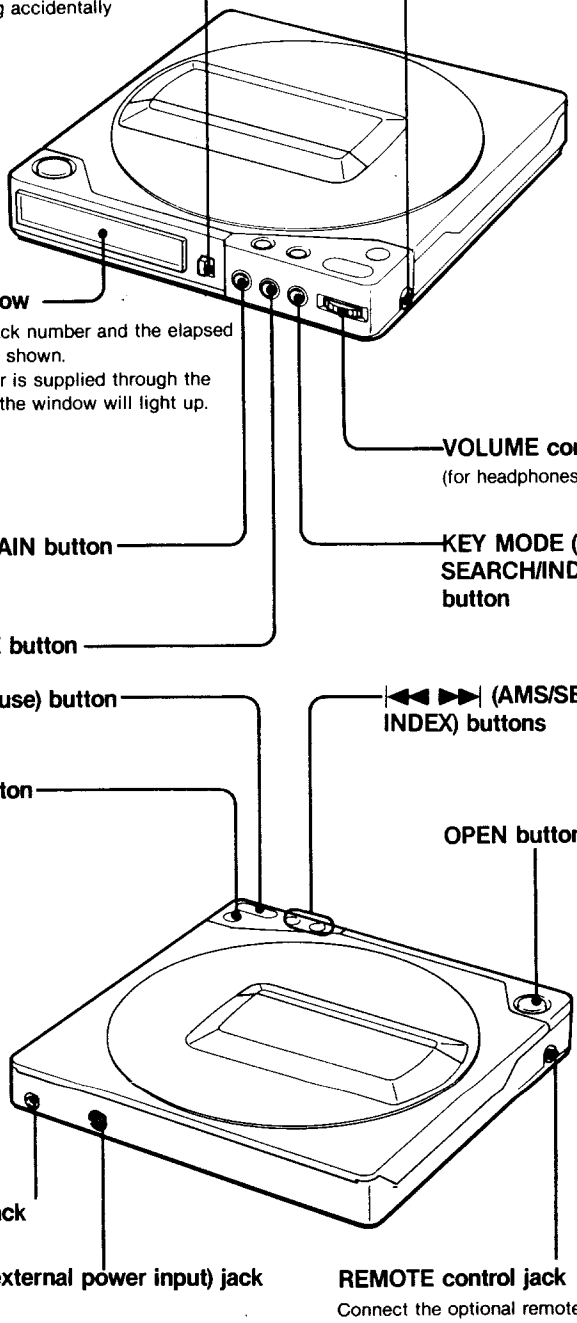
Notes



Polarity of Son

- Use only the supplied AC power adaptor or the recommended car battery cord manufactured by Sony. Polarity of the plugs of other manufacturers may be different.
- Do not use the battery case Sony EBP-380.

Location and Function of Controls


HOLD switch
Slide this switch to the right so that its orange mark appears. This locks the buttons to prevent them from being accidentally depressed.
PHONES (headphones) jack (stereo minijack)
Display window
Normally the track number and the elapsed playing time are shown.
When the power is supplied through the DC IN 9V jack, the window will light up.
VOLUME control
(for headphones listening)
ENTER/REMAIN button
KEY MODE (AMS*/ SEARCH/INDEX) button
PLAY MODE button
►II (play/pause) button
|◄◄ ►►| (AMS/SEARCH/ INDEX) buttons
■ STOP button
OPEN button
LINE OUT jack
(stereo minijack)
DC IN 9V (external power input) jack
REMOTE control jack
Connect the optional remote control kit.

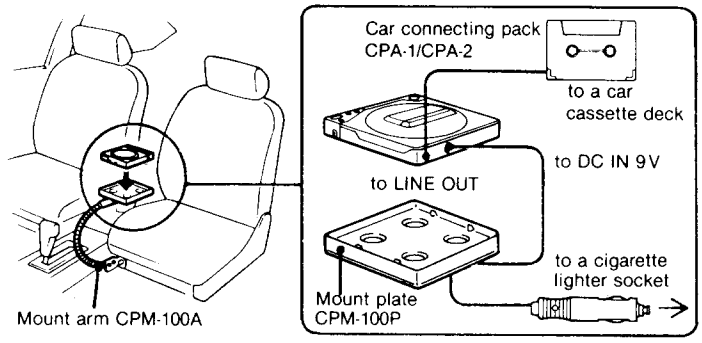
*AMS is the abbreviation of Automatic Music Sensor.

Various Ways of Using

For details, refer to the instruction manual of each product.

Listening in a Car

Use the following optional equipment.



The power is supplied through the cigarette lighter socket.

Notes

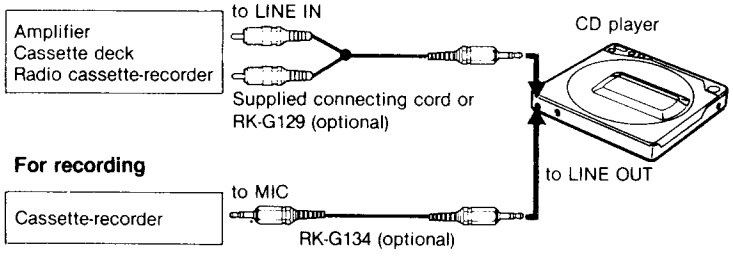
- Unplug the unit from the cigarette lighter socket when it is not being used. Otherwise, it may drain the car battery.
- Any connection other than with the CPA-2 may cause noise.

Do not put the unit on a dashboard nor leave it in a car parked in sunlight since the temperature may rise excessively.

Connecting with Other Equipment

You can listen to the CD player through speakers, or record its sound.

For monitoring through speakers and for recording



For recording

Notes on connection

- Turn off the amplifier before making connections.
- Plug in the white plug to the L (left channel) jack, and the red plug to the R (right channel) jack.
- Be sure to insert the cable connectors firmly into the jacks. Loose connections may cause hum and noise.
- Be sure not to connect the CD player to the PHONO input jack of the amplifier.
- If the CD player causes interference to radio and television reception, turn off the player or move the player away from the receiver.

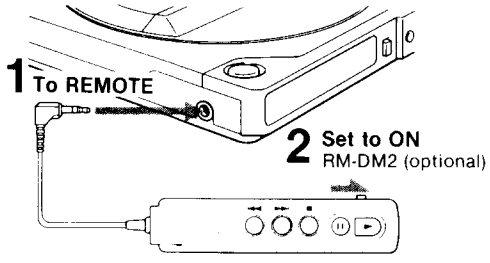
Using a Remote Commander

Use the Sony RM-DM2 (wired) or RM-DM1K (wireless) remote control kit (optional).
Be sure to connect in the stop mode.

Notes

- When the rechargeable battery is installed, the RM-DM1K cannot be operated.
- Remove the receiver from the unit when it is not used.
- The remote commander functions even when the buttons on the player are locked with the HOLD switch.

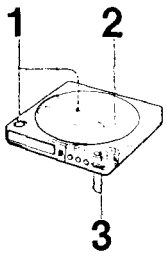
How to use the RM-DM2

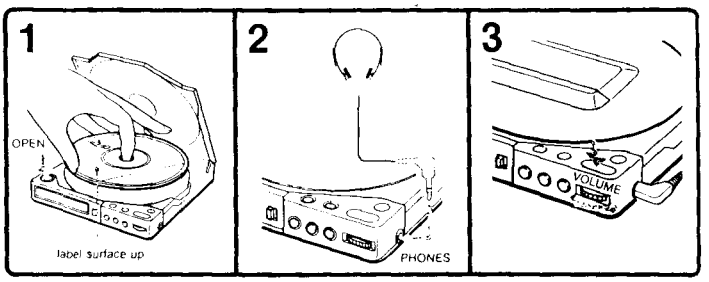


After using the unit

Be sure to set the REMOTE switch back to OFF to save power of the CD compact player.

Disc Playing





To pause
Press ▶II (To play, press again.)

To stop
Press ■

What is this indication?
◖▯▯▯▯◗ indicates the remaining power of the battery. When the battery becomes weak, the segments will go out one by one beginning with the left segment. Charge the battery when three of the segments have gone out. Note that if the battery case Sony EBP-360 (optional) is attached, the indicators will operate only when the batteries in the case become very weak.

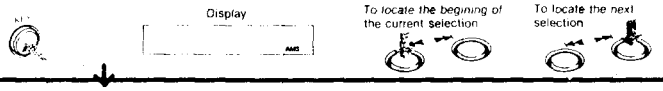
On 3 inch CD single
A 3 inch CD single can be played without an adaptor in this player.

Note
If ▶II is pressed with the disc inserted upside down, the TRACK indication becomes "00", and the player is kept in the playback mode. Press the OPEN button to open the lid, and re-insert the disc with the label side up.

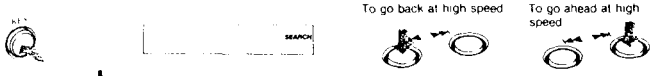
Locating a Particular Portion

Each time KEY MODE is pressed during play or pause, locating mode changes as follows.

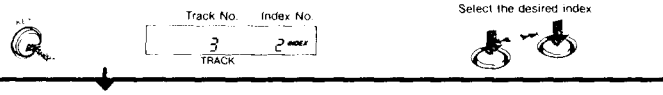
Locating a Particular Selection —AMS



Locating a Particular Point in a Selection —SEARCH



Locating a Particular Index* —INDEX Search



To return to the AMS function, press KEY MODE.

Notes on the AMS function
- When you press the ⏮ or ⏭ button in the pause mode, the player pauses at the beginning of the located selection.
- During program play, AMS operates in the memorized order.

What is this indication?
_!_! appears if you continuously press the ⏭ button at the end of the disc.
To return to a track indication, press the ⏮ button.

On a disc without indexes
If you press ⏮ or ⏭ during INDEX search mode, the beginning of the current selection will be played.

***What is index?**
The selections on some discs are divided into sections, such as the movements of a symphony. An index number is assigned to each section thus making it possible to find a particular section easily.

Various Playing Modes

Each time PLAY MODE is pressed during play, play mode changes as follows.
To stop the disc, press ■.

Repeating One Selection —1 REPEAT

After the current selection ends, the same selection will be repeated.

Repeating the Whole Disc —ALL REPEAT

When play reaches the end of the disc, it restarts from the first selection.

Repeating between Two Designated Points —A↔B REPEAT

1 At the starting point (A) of the repeat play

Point A is memorized

2 At the ending point (B)

Point B is memorized.
Play starts from point A.

Playing in a Random Order —SHUFFLE REPEAT

Play begins from the following selection.
The other selections in the disc will be played in a random order. Once all the selections have been played, they will be reshuffled and played in a different order.

Playing in the Desired Order —RMS* (program)

To play repeatedly

To play once

1 Choose the desired selection.

5th selection Program 1

2

Program 2

3 Repeat steps 1 and 2. (up to 22 selections)

4

[MEM] disapperas and play begins.

*RMS is the abbreviation of Random Music Sensor.

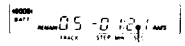
To return to normal play, press PLAY MODE.

On time counter
Normal display shows the elapsed playing time.

Track No. of the current selection

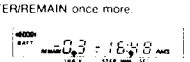
Elapsed playing time

To display the remaining time of the current selection
Press ENTER/REMAIN.



Remaining time of the current selection

To display the remaining time of the whole disc
Press ENTER/REMAIN once more.



(It will not appear during shuffle play or program repeat play. During program play, the remaining time of the whole program appears.)

The amount of the remaining selections

Remaining time of the whole disc

To return to the normal display
Press ENTER/REMAIN again.

The ENTER/REMAIN button operates even while the HOLD function is in use.

During shuffle repeat play
To locate the beginning of the current selection
Press |◀◀.

To locate the next selection
Press ▶▶|.
You cannot locate a previous selection even if you keep pressing the |◀◀ button.

On shuffle and program play
A blank space of approx. 3 seconds will be inserted between selections automatically.

If another selection is memorized after 22 selections have been memorized
The first selection will be cleared and the new one will be memorized in its place.
The program remains until the lid is opened.

Notes on compact disc

Handle the disc by its edge.

Not this way

Do not touch the surface.

Not this way

Do not stick paper or tape nor write anything on the surface.

Troubleshooting Guide

Should any problem persist after you have made the following checks, consult your nearest Sony service facility.

Symptom	Cause and/or remedy
Disc play does not start.	• The disc is inserted upside down or incorrectly. Insert the disc correctly with the label surface up. • Dusty or defective disc. • Dirty or dusty lens. • The disc compartment lid is not closed. • Moisture condensation. Leave the player in a warm place until the moisture evaporates. • The AC power adaptor is not plugged into the wall outlet. • The car battey cord is not firmly connected. • The unit is not placed on a level surface. • The HOLD switch is slid to the right. • Weak battery.
No sound from the headphones.	• The headphones plug is not firmly connected to the PHONES jack. • Adjust the VOLUME control. • Dirty plug.
No sound from the connected speakers	• Check the connections. • The amplifier is not turned on.
Skipping of sound	• Dirty or defective disc. • Dirty lens. • Strong vibration.

General

Power requirements	Supplied rechargeable battery pack BP-2 or BP-100 (optional) DC IN 9 V jack accepts: Supplied AC power adaptor for use on 120 V AC, 60 Hz Sony CPM-100P car mount plate (optional) or Sony DCC-120A car battery cord (optional) for use on 12 V car battery
Power consumption	1.9 W DC
Dimensions	Approx. 125.8 × 20.8 × 134.6 mm (5 × 27/32 × 5 3/8 in.) (w/h/d) not incl. inclined part (depth), projecting parts and controls Approx. 127.3 × 24.1 × 136.2 mm (5 1/8 × 31/32 × 5 3/8 in.) (w/h/d) incl. projecting parts and controls
Weight	Approx. 380 g (13.5 oz), not incl. rechargeable battery Approx. 460 g (1 lb) incl. rechargeable battery
Supplied accessories	AC power adaptor (1) Rechargeable battery pack (1) Carrying case (1) Connecting cord (1) (stereo miniplug ←→ two phono plugs)

Design and specifications subject to change without notice.

Optional Accessories

Wireles remote control kit RM-DM1K
Wired remote control unit RM-DM2
Rechargeable battery pack BP-2, BP-100*
Battery charger BC-BP2
Car battery cord DCC-120A
Car connecting pack CPA-2
Car mount plate CPM-100P
Mount arm CPM-100A
Active speaker SRS-55

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed information about the optional accessories available in your country.

* Approx. 6 hours of continuous play is possible when the battery has been charged for 8 hours.

Specifications

CD section

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wavelength: 780 nm Emission duration: Continuous Laser output: Less than 44.6 μW * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Error correction	Sony Super Strategy Cross Interleave Reed Solomon Code
D-A conversion	16-bit linear, 4 fs digital filter
Frequency response	20–20,000 Hz ±1 dB* *
Dynamic range	More than 90 dB* *
Signal-to-noise ratio	More than 85 dB
Wow and flutter	Below measurable limit* *
Outputs (at 9 V input level)	Line output (stereo minijack) Output level 0.7 V rms at 50 kilohms Load impedance over 10 kilohms Headphones (stereo minijack) 9 mW + 9 mW at 32 ohms

* *Measured by EIAJ CP-307